# Networking & Information Technology Research and Development Program

High End Computing Interagency Working Group (HEC IWG) & Big Data Senior Steering Group (BDSSG)

Peter Lyster, Deputy Director National Coordination Office NITRD

Supercomputing and Big Data: From Collision to Convergence



# Networking and Information Technology Research and Development Program

- Created by the <u>High-Performance Computing (HPC) Act of 1991 (Public Law 102-194)</u>
- Purpose: To assure U.S. leadership in, and accelerate development and deployment of, advanced networking, computing systems, software, and associated information technologies.
- Overseen by the National Coordination Office (NCO)
  - Purpose: Provides support for the NITRD Program by providing technical expertise, planning, and coordination and by serving as the Program's central point of contact.
  - Vision: To be a catalyst for collaboration, information exchange, and outreach to foster knowledge, methods, R&D, technology transfer, and innovation to meet the NITRD Program goals.



## **Organization**

White House Executive Office of the President Office of Science and Technology Policy

National Science and Technology Council

Committee on Technology

National Coordination
Office for NITRD

Subcommittee on Networking and Information Technology R&D (NITRD)



#### Goals

- What can supercomputing and big data communities learn from each other, and how can this be done?
- Can the technology for big data and high-fidelity HPC simulation really merge? If so, how may it happen, and when?
- What are the potential outcomes and impacts from such a merger?
- What research is needed to investigate the challenges and opportunities presented by the convergence of supercomputing and big data?



### **Panelists**

- Randal Bryant, White House Office of Science and Technology Policy
- Andrew Moore, Carnegie Mellon University
- George Biros, University of Texas at Austin
- Ian Foster, Argonne National Laboratory & University of Chicago
- David Bader, Georgia Tech

